Contents	Reference to last Measurement
7	8

DBR No 40/16-17
DATED 20/3/2017

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3755

Serial No.....

Name of work Widening & Asphalting of main road from Sampigehalli Agrahara Village in ward From no-05, Byatarayanapura sub-division To

Name of Contractor of nature of Agency Sri G.N. Ramesh

Date of commencement of work 04/02/2017

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Name of work:- Widening & Asphalting of main road from Sampigehalli Agrahara village in ward no-05, Byatarayanapura sub-division.						
	Estimate cost:- 140.00 lakhs, Job Code:- 005-16-000023						
	P-Code:- P3089, CMC & TMC Grant						
	Adimistrative Sanction no:- BBMP/JC/YZ/AS/01/16-17 Dt: 10-06-2016						
	Technical Sanction no:- BBMP/CE/YZ/TS/12/16-17 Dt: 10-06-2016						
	Contractor Name:- G.N. Ramesh						
	Work Order no:- EE(Projects)/Ynk Zone/WO/30/16-17 Dt: 04-02-17						
	Aggrement no:- EE(P)/Y.Z/AGG/31/16-17 Dt: 4-2-17						
	Date of Commencement:- 04-02-2017						
	Date of Completion:- 28-02-2017						

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No-01						
	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 mtr & an average lift upto 1.5 m excavated surface levelled & sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification						
	Qty Vide Page no (2) of enclosed excel sheet					417.96 Cum	
	@ rate of Rs. 168-63/-						
							Rs. 70481.10
						AE	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3756

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last, Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO-02 Providing & laying in position plain cement concrete of mix 1:3:6 with OPC Cement @ 220 kgs. with 40mm & downsize graded granite metal coarse aggregate @ 0.892 Cum & fine aggregate @ 0.465 cum machine mixed, concrete laid in layers not exceeding 15cms thick, well compacted in foundation including cost of all material, labour, HOM of machinery, curing complete as per specification. Qty Vide Page no (3) of enclosed excel sheet					3.26 Cum	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	@ rate of Rs. 4964.60/-						
						Rs. 16204.45	
	Item NO-03					AE	16185/-
	Providing & laying reinforced cement concrete pipe NP-3 for culverts including pointing ends, & fixing collars with cement mortar 1:2 including cost of all materials, labour, curing complete as per specification.						
	Qty Vide Page no (4) of enclosed excel sheet				20.00 Rmtr		
	@ rate of Rs. 3809.70						
						Rs. 76194.00	
						AE	

M.A.R. 57 (Rule 116)

Measurement Book

Serial No.....

No. A/10 3757

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No-04 Providing & constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cm high, bond stones at 2m apart in each course including cost of materials, labour, curing complete as per specification.						

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	~~Qty Upto 125%~~						
	Qty Vide Page no (5)						
	& enclosed excel sheet					7.97 Cum	
	Qty upto 125%	-	-	-	-	3.43 Cum	
	@ rate of Rs. 3920.28/-						
							Rs. 13426.96
	Qty above 125%	-	-	-	-	4.54 Cum	13446/-
	@ rate of Rs. 4207.43/-						
							Rs. 19114.37
							19101/-
						Total Amount:	32541.33
						AE	32,547/-

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3758

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No-05 Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after racking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specification. Qty Vide Page no (6) of enclosed excel sheet @ rate of Rs. 94.18/-					14.40	Sqm
						Rs.	1356.19

AE

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO-06						
	Providing & laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm & down size graded granite metal coarse aggregate @ 0.878cum & fine aggregate @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cm thick, well compacted in foundation, plinth & cills, including cost of all material, labour, HOM of machinery, curing, complete as per specification.						
	Qty Vide Page no (7) of enclosed excel sheet					0.16 Cum	
	@ rate of Rs. 5205.20/-						Rs. 832.83
						AE	

M.A.R. 57 (Rule 116)

Measurement Book

Serial No.....

No. A/10 3759

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No-07						
	Excavation for road work in soil with hydraulic excavator of 0.9cum bucket capacity including cutting & loading in tippers, trimming bottom & side slopes, in accordance with requirements of lines, grades & cross sections & transporting to the embankment location to a lead of 1km & complete as per Specification.						
	Qty Vide Page no (10) of enclosed excel sheet					- - - - 2977.76 Cum	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Qty Upto 125% @ rate of Rs. 135.87/-	-	-	-	-	612.50 Cum	
						Rs. 83220.38	
	Qty above 125% @ rate of Rs. 137.38/-	-	-	-	-	2365.26 Cum	
						Rs. 324949.50	324939/-
					Total Amount Rs	408169.88	
							408159.38
	Item NO-08						
	Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface & compacting with vibratory						

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3760

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	power roller to achieve the desired density, complete as per specification.						
	Qty Vide page no (13) & enclosed excel sheet					1675.22 Cum	
	@ rate of Rs. 1537.80/-						
							Rs. 2576154.85
						AE	2576153/-

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item NO-09						
	Providing, laying, spreading & compacting graded stone aggregate to wet mix macadam specification including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub base/base course on well prepared surface & compacting with vibratory roller to achieve the desired density complete as per specification						
	Qty Vide Page no (16) of enclosed excel sheet @ rate of Rs 1624.83/-					2094.03 Cum	
							Rs. 3402436.61

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3761

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No-10						
	Providing & applying prime coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface & spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specification.						
	Qty Vide Page no (19) of enclosed excel sheet					8376.11 Sqm.	
	@ rate of Rs. 26.61/-						Rs. 222888.15
						AE	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item NO-11 Providing & applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surface at 2.5 kg per 10 Sqm, heating bitumen in boila fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, Hom of machineries complete as per specification. Qty Vide Page no (25) of enclosed excel sheet @ rate of Rs. 11.26/-					18070.71 Sqm Rs. 203476.19	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3762

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO-12 Providing & laying dense bituminous macadam 50mm to 75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60TPH capacity HMP with mechanical paver Gr-II, pre mixed with VG30 grade bituminous binder & transporting the hot mix to work site, laying to the required grade, level & alignment, rolling with smooth wheeled, vibratory & tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specification						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Qty Vide Page no (28) of enclosed excel sheet @ rate of Rs. 6035.56/-					451.77 Cum	
						Rs.	2726671.36
	Item No-13 Providing & laying bituminous concrete 40mm compacted thickness with VG-30 Bitumen grade using 40-60 HMP using crushed aggregates of grading-II, pre mixed with bituminous binder at 6% of mix & filler, transporting the hot mix to work site, laying with a paver finisher with to the required grade, level & alignment, rolling with smooth wheeled, vibratory & tandem rollers to achieve the desired compaction as per MORTH specification clause no-509. complete						

M.A.R. 57 (Rule 116)

Measurement Book No. A/10 3763

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	in all respects as per specification						
	Qty Vide Page no (31) of					361.41	Cum
	enclosed excel sheet						
	@ rate of Rs. 7298.97/-						
						Rs. 2637951.40	
						AE 2637920/-	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO-14						
	Road marking with Hot applied thermoplastic compound with reflectrising glass beads on bitominous surface providing & laying of hot applied thermoplastic compound 2.5mm thick including reflectorising glass beads at 250gm per Sqm area, thickness of 2.5mm in exclusive of surface applied glass beads as per IRC; 35. The finished surface to be level, uniform & free from streaks & holes complete as per specification.						
	Qty Vide Page no (37) of enclosed excel sheet	-	-	-	-	316.24	Sqm
	@ rate of Rs. 448.44/-						
						Rs. 141813.54	

M.A.R. 57 (Rule 116)

Measurement Book

Serial No..... No. A/10 3764

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO-15						
	Providing & fixing of reflective raised pavement marker RPM's Cat eyes / Road studs confirming to ASTM D 4280 type II, having reflective panels made of prismatic lens of total internal reflection, the prismatic lens should be electronically fixed (welded) to the body made of polycarbonate mould, with a height of 20mm size of 130mm x 105mm & reflecting area of 135 sqcm with the slope of retro reflective surface with in the limit of 35+5 degree to the base on either side. The marker shape II display an initial minimum luminous intensity of 279 mcd/lux at an entrance angle						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	of zero degree & observation angle of 0.2 degree. The corresponding values for 20 degree entrance & 0.2 degree observation angle shall be 112 mcd/lux with color multiplying factor on either cases for white, yellow & red markers being 1.0, 0.68 & 0.25 respectively. The RPM's should be fixed by using 2 numbers of polymer shanks using appropriate adhesive as recommended						
	Qty Vide Page no (38) of enclosed exce sheet	-	-	-	-	900.00	Nos
	Qty upto 125% @ rate of Rs. 307.15/-	-	-	-	-	731.00	Nos
						Rs. 224526.65	
	Qty above 125% @ rate of Rs. 385.87/-	-	-	-	-	169.00	Nos
						Rs. 65212.03	
					Total Amount	Rs. 289738.68	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3765

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO-16 Retro-reflectorised traffic signs, Providing & fixing of retro-reflectorised cautionary, mandatory & informatory sign as per revised IRC 67-2012 made of high intensity grade sheeting vide clause 800.1.3 fixed over Aluminium sheeting 1.5mm thick supported on a mild steel angle iron post 75mm x 75mm x 6mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45cm x 60 cm, 60 cm below ground level as per approved drawing complete as per specification.						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Qty Vide Page no (39) of enclosed excel sheet @ rate of Rs. 3967.38/-					3.00 Nos.	
						Rs. 11902.14/-	
						AE	
	Extra Item No-01						
	Providing & fixing RCC precast cover slab of 100mm thick for drain in cement concrete M20 using graded jelly 20mm & downsize with steel reinforcement including formwork, lift charges, curing & concrete finish surface on both sides etc complete as per drawing & direction of Engineer-in-charge.						

M.A.R. 57 (Rule 116)

Measurement Book

Serial No..... No. A/10 3766

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

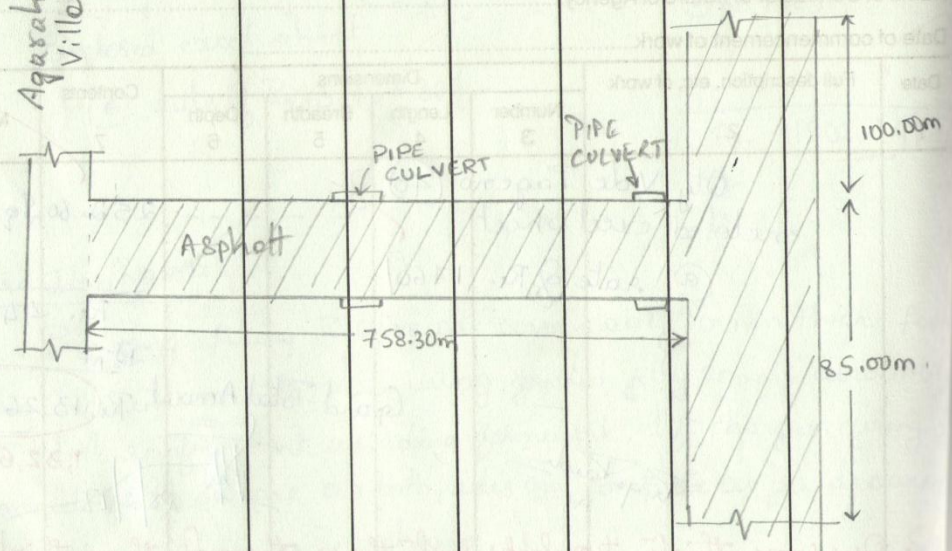
Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Qty Vide Page no (40) of enclosed excel sheet @ rate of Rs. 1760/-					252.60 Sqm	
						Rs. 444576.00	
						AE	
	Grand Total Amount					Rs. 13 263388.78	
						1,32,63,331/-	
	Priya Tandi AE					28/2/17	

Rs. One crore thirty two lakhs sixty three thousand three thirty one Only.

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Agasahera Village						



M.A.R. 57 (Rule 116)

Measurement Book

No. A/10 3767

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Certificate :-						
	1] Certified that the work has be completed satisfactorily.						
	2] Certified that debris have been removed from workspot.						
	3] Certified that there is no departmental issues with the Contractor.						
	Priya Parshi AE				28/2/17		

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	I & Final Bill : 1,32,63,331						
	1% IT : 1,32,633						
	4% VAT : 5,30,533						
	1% CESS : 1,32,633						
	0.1% CBF : 13,263						
	LR : 5,31,681						
	T/D : 13,40,743						
	Net payable : 1,19,22,588/-						

Audited & Admitted for Rs. 1,32,63,331/-

1,19,22,588/- by Cheque

and Rs. 13,40,743/- by Adjustment

Accts. Supdt.
Project Division
B.B.M.P.

Exe. Engineer
Project Division
B.B.M.P

31/3/17